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25096 7590 05/09/2008

PERKINS COIE LLP
PATENT-SEA
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SEATTLE, WA 98111-1247

EXAMINER

PATEL, MANGLESH M

ART UNIT

PAPER NUMBER

2178

DATE MAILED: 05/09/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,013

04/02/2004

Dethe Elza

413478002US

2742

TITLE OF INVENTION: METHODS AND SYSTEMS FOR ENABLING COLLABORATIVE AUTHORING OF HIERARCHICAL DOCUMENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	08/11/2008

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THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as NO:

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(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/817,013 04/02/2004 Dethe Elza 413478002US 2742

TITLE OF INVENTION: METHODS AND SYSTEMS FOR ENABLING COLLABORATIVE AUTHORIZING OF HIERARCHICAL DOCUMENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional YES \$720 \$300 \$0 \$1020 08/11/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
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PATEL, MANGLESH M 2178 715-513000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

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(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
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4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
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☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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25096	7590	05/09/2008	EXAMINER	
PERKINS COIE LLP PATENT-SEA P.O. BOX 1247 SEATTLE, WA 98111-1247			PATEL, MANGLESH M	
			ART UNIT	PAPER NUMBER
			2178	
DATE MAILED: 05/09/2008				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 414 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 414 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/817,013

Applicant(s)

ELZA ET AL.

Examiner

MANGLESH M. PATEL

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE filed 2/5/2008.
2. ☒ The allowed claim(s) is/are 1-4,6-13,15-40,44-54,56-59 and 61-65.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rajiv P. Sarathy on April 24, 2008.

EXAMINER'S PROPOSED AMENDMENT

Claims

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, in a client computing device having a memory, for enabling authors to work on a hierarchical document, comprising:
 - retrieving a local copy of the hierarchical document from a server computing device;
 - loading at least a portion of the local copy of the hierarchical document into the memory of the client computing device;
 - receiving an indication of a requested mutation to the in-memory portion of the local copy of the hierarchical document from a user;
 - sending a message to the server computing device containing the requested mutation, the message represented in XML, wherein the in-memory portion of the local copy of the hierarchical document remains available for editing by the user;
 - when the requested mutation is successfully applied by the server computing device to the hierarchical document, receiving a message from the server computing device acknowledging a successful mutation to the hierarchical document, the message is represented in XML; and
 - when the requested mutation is not successfully applied by the server computing device to the hierarchical document, receiving a message from the server computing device containing an indication to revert the local copy of the hierarchical document to a current form of the hierarchical document on the server computing device, the message represented XML, wherein the hierarchical document comprises a DDOM for providing a real-time view of document state.
2. (Original) The method of claim 1 wherein an application program is the user.

3. (Previously Presented) The method of claim 1 wherein an author is using an application program that accesses the hierarchical document.

4. (Currently Amended) The method of claim 3 wherein the author makes a change to the hierarchical document using the application program and further wherein the indication of a requested mutation relates to the change.

5. (Canceled)

6. (Currently Amended) The method of claim 1 wherein the message is contained in a frame.

7. (Original) The method of claim 6 wherein the frame comprises multiple messages.

8. (Currently Amended) The method of claim 1 wherein when the message from the server computing device is received, the message contains no nodes that the author is not privileged to read.

9. (Original) The method of claim 1 wherein the requested mutation is not successfully applied when the user is not privileged to make the requested mutation.

10. (Original) The method of claim 1 wherein the requested mutation is not successfully applied when the requested mutation conflicts with a mutation previously made to the hierarchical document on the server computing device.

11. (Original) The method of claim 1 wherein the message containing an indication to revert the document comprises sufficient information to determine the current form of the hierarchical document on the server computing device.

12. (Original) The method of claim 1 wherein the message acknowledging the mutation includes additional mutations to be applied to the local copy of the hierarchical document.

13. (Currently Amended) A system, in a client computing device having a memory, for enabling authors to work on a hierarchical document, comprising:

- a component that retrieves from a server computing device the hierarchical document and makes a local copy of the retrieved hierarchical document;
- a component that loads at least a portion of the local copy of the hierarchical document into the memory of the client computing device;
- a component that receives from a user an indication of a requested mutation to the in-memory portion of the local copy of the hierarchical document;

a component that sends to the server computing device a message containing the requested mutation, the message represented in XML, wherein the in-memory portion of the local copy of the hierarchical document remains available for editing by the user; and

a component that receives from the server computing device a message indicating whether the requested mutation was successfully applied to the hierarchical document, the message represented in XML, wherein the hierarchical document comprises a DDOM for providing a real-time view of document state and, when the requested mutation was not successfully applied, the message received from the server contains information corresponding to a current form of the hierarchical document sufficient to mutate the local copy of the hierarchical document to reflect the current form of the hierarchical document on the server computing device.

14. (Canceled)
15. (Original) The system of claim 13 wherein the message from the server computing device arrives in a frame.
16. (Original) The system of claim 15 wherein the frame comprises multiple messages.
17. (Original) The system of claim 15 wherein the frame has an indication of a first message identifier and a last message identifier.
18. (Original) The system of claim 17 wherein the component that receives the message from the server determines whether a message was missed.
19. (Original) The system of claim 18 wherein a message is missed when the first message identifier exceeds, by more than a predetermined number, an identifier of a last message previously received from the server computing device.
20. (Original) The system of claim 19 wherein the predetermined number is one.
21. (Original) The system of claim 13 including a component for determining whether a DDOM fragment can be used to handle the requested mutation.
22. (Original) The system of claim 21 wherein the DDOM fragment can be used before a node is added to the hierarchical document.
23. (Original) The system of claim 21 wherein a node is added to the DDOM fragment before the DDOM fragment is added to the hierarchical document.

24. (Original) The system of claim 21 wherein a mutation is made in relation to the node.
25. (Original) The system of claim 21 wherein the message containing the requested mutation is not sent to the server computing device.
26. (Currently Amended) A method in a server computing device for enabling authors to work on a hierarchical document, comprising:
for each author,
providing to a client computing device having a memory a copy of the hierarchical document, wherein at least a portion of the client copy of the hierarchical document is loaded into the memory of the client computing device, the hierarchical document comprising a DDOM for providing a real-time view of document state;
receiving from the client computing device an indication of a mutation request corresponding to a mutation made to the in-memory portion of the client copy of the hierarchical document, wherein the in-memory portion of the client copy of the hierarchical document remains available for editing by the author;
attempting to apply the received mutation request to the hierarchical document;
when the mutation cannot be applied to the hierarchical document,
sending to the client computing device a message containing an indication to revert the client copy of the hierarchical document to a current form of the hierarchical document; and
when the mutation can be applied to the hierarchical document,
sending to the client computing device a message containing an indication of an applied mutation,
wherein the messages are represented in XML.
27. (Original) The method of claim 26 wherein the indication of the applied mutation is sent as an answer to the client computing device.
28. (Original) The method of claim 26 wherein the indication of the applied mutation is sent as a broadcast message to a second client computing device having a copy of the hierarchical document.
29. (Original) The method of claim 28 wherein when the broadcast message is received by the second client computing device after the second client computing device has sent a requested mutation message but before the second client computing device receives an answer, the mutation indicated in the broadcast message is applied to the client copy of the hierarchical document.

30. (Currently Amended) A method in a distributed computer system for sharing a hierarchical document, comprising:

receiving at a server computer system a hierarchical document from a document source client computer system, the hierarchical document comprising a DDOM for providing a real-time view of document state;
distributing to a client computer system other than the document source client computer system a copy of the hierarchical document, wherein the client computer system has a memory and at least a portion of the copy of the hierarchical document is loaded into the memory;
receiving from a client computer system a mutation request to be applied to the hierarchical document, wherein the mutation request corresponds to a mutation made to the in-memory portion of the client copy of the hierarchical document, and further wherein the in-memory portion of the client copy of the hierarchical document remains available for editing on the document source client computer system;
sending to the client computer system from which the request was received a response message containing an answer;
and
sending to a connected client computer system other than the client computer system from which the mutation request was received a broadcast message,
wherein the messages are represented in XML.

31. (Original) The method of claim 30 wherein the distributing occurs when a client computer system other than the document source client computer system requests the hierarchical document.

32. (Original) The method of claim 30 wherein the mutation request is received from the document source computer system.

33. (Original) The method of claim 30 wherein the mutation request is received from a client computer system other than the document source computer system.

34. (Original) The method of claim 30 wherein the mutation request is to delete a node.

35. (Original) The method of claim 34 wherein the node is placed into a pool of deleted nodes.

36. (Original) The method of claim 30 wherein the pool is periodically cleared.

37. (Currently Amended) A method, performed by a computing device having a memory, for enabling authors to work on a hierarchical document, comprising:

retrieving the hierarchical document from another computing device, the hierarchical document comprising a DDOM for providing a real-time view of document state;
loading at least a portion of the hierarchical document into the memory;

modifying the in-memory portion of the retrieved hierarchical document;
sending an indication of the modification as a message comprising a mutation request, the message represented in XML, to the other computing device, wherein the in-memory portion of the hierarchical document remains available for editing on the computing device;
when the sent modification cannot be applied to the hierarchical document on the other computing device, reverting the hierarchical document to a current form of the hierarchical document on the other computing device; and
when the sent modification is applied on the other computing device, receiving an indication that the modification was successfully applied.

38. (Original) The method of claim 37 wherein the modifying includes adding a node.
39. (Original) The method of claim 37 wherein the modifying includes removing a node.
40. (Previously Presented) The method of claim 37 wherein the modifying includes changing values corresponding to an attribute of a node.
- 41-43. (Canceled)
44. (Currently Amended) The method of claim 37 wherein the indication is a message.
45. (Original) The method of claim 44 where contents of the message are represented in XML.
46. (Original) The method of claim 37 including receiving an indication of a failure when the sent modification cannot be applied on the other computing device.
47. (Previously Presented) The method of claim 46 wherein the indication includes information corresponding to the hierarchical document sufficient to determine the current form of the hierarchical document on the other computing device.
48. (Original) The method of claim 37 wherein the modifying includes calling a method of an XML document object model.
49. (Original) The method of claim 37 wherein the modifying is performed by a user.
50. (Original) The method of claim 49 wherein the user is a client-side application program that implements business logic.

51. (Original) The method of claim 49 wherein the user is a human.
52. (Original) The method of claim 49 wherein the user uses an application program interface of the client component.
53. (Currently Amended) A system including a processor for enabling authors to work on a hierarchical document, comprising:
a component that exchanges messages with a client computing device having a memory, the messages represented in XML;
a component that loads a hierarchical document, the hierarchical document comprising a DDOM for providing a real-time view of document state; and
a component that receives a message corresponding to a mutation request from the client computing device, determines whether the mutation request can be applied to the hierarchical document, applies the mutation to the hierarchical document, and sends an indication message of an applied mutation to the client computing device wherein the indication message is a broadcast message;
wherein the mutation request corresponds to a mutation made to at least a portion of a copy of the hierarchical document loaded into the memory of the client computing device, and further wherein the in-memory portion of the copy of the hierarchical document remains available for editing on the client computing device.
54. (Original) The system of claim 53 wherein the indication message of an applied mutation is an answer message to a client that made the mutation request.
55. (Canceled)(Original) The system of claim 53 wherein the indication message of an applied mutation is a broadcast message to a client that did not make the mutation request.
56. (Original) The system of claim 53 wherein the determining includes receiving an indication from a server-side application that implements business logic.
57. (Original) The system of claim 53 wherein the determining includes checking a privilege.
58. (Original) The system of claim 53 wherein the hierarchical document is represented as a tree.
59. (Original) The system of claim 58 wherein the tree is represented in XML.
60. (Canceled)

61. (Previously Presented) The system of claim 53 wherein a message includes mutations corresponding to multiple nodes.

62. (Previously Presented) The system of claim 53 wherein a message includes mutations corresponding to a node.

63. (Original) The system of claim 53 wherein the determining includes checking whether a node is in the document.

64. (Original) The system of claim 53 including a component for storing the applied mutation in a log of mutations.

65. (Original) The system of claim 64 including a component for creating a view of the hierarchical document based on a snapshot of the hierarchical document and the applied mutation stored in the log of mutations.

REASONS FOR ALLOWANCE

2. Claims 1-4, 6-13, 15-40, 44-54, 56-59 and 61-65 are allowed.

3. The prior art of record fails to disclose or suggest features in the Proposed Amendment.

4. The following is an examiner's statement of reasons for allowance: The Cited references of Shi (U.S. 5,623,659), Bray (U.S. 6,529,905), Shoens (U.S. 4,965,719) and Cramer (U.S. 5,390,316) fail to teach the amended Independent claims. The amended Independent claims describes the use of DDOM (Distributed Document Object Model), the DDOM represents a collaborative environment that allows multiple authors using different computing systems to author portions of a hierarchical document by modifying the Document Object Model. The DDOM is defined in applicants provisional applications 60/471284 & 60/471567. On page 4 of the provisional document it describes the framework of the DDOM which differentiates it from a typical DOM (Document Object Model). A typical DOM is a single API (application programming interface) that is run through the client's browser for modification of the document structure. The invention however includes server side and client side applications to support collaborative authoring. The DDOM also differs from DOM because it is made up of extended API services within a server environment, such services support broadcasting/handling messages via routing mutation events, node locking, node management, change collision, avoidance and event notification.

5. The invention also differs from the prior art because it accesses an in-memory representation of the document object model thus allowing the author to modify a portion of the memory representation and only that portion is send back to the server as a mutation, the server then either accepts or rejects the message. If accepted a message notifies the user that it was accepted and the master version of the document is updated. If rejected then the server notifies the user with a message allowing the user to revert to the server copy of the document. None of the cited references support or even mention the use of a DDOM infrastructure for collaborative authoring of documents using a document object model.

6. The newly cited references of Schwedtfeger also differ from the claimed invention. Although Schwedtfeger describes a Distributed Document Object Model it meaning of distributed differs significantly from the claimed invention. The claimed Distributed model represents a framework for collaborative authoring; Schwedtfeger fails to describe any collaborative authoring that includes server side software using extended API's. Schwedtfeger instead teaches support on client/mobile devices for accessing/modifying the DOM. Furthermore he fails to teach or even suggest the server side handling of messages for modifying two documents residing in different locations using the DOM.

7. Therefore the references fail to teach the elements recited in the independent claims. Furthermore, the claimed feature would not have been obvious to a person of ordinary skill in the art at the time of the invention in view of the prior art of record. Because neither Shi (U.S. 5,623,659), Bray (U.S. 6,529,905), Shoens (U.S. 4,965,719) nor Cramer (U.S. 5,390,316) teach the features recited in the independent claims has described above. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled Comments on "Statements of Reasons for Allowance".

CONCLUSION

References Cited

8. The art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Bibliowicz et al. (U.S. Pub 2002/0049786) discloses "Collaboration Framework"
- Schwerdtfeger et al. (U.S. 7,054,952) discloses "Electronic Document Delivery System Employing Distributed Document Object Model (DOM) based Transcoding And Providing Interactive JavaScript Support"
- Chatterjee et al. (U.S. Pub 2007/0124373) discloses "Methods And Apparatus For Defining A Collaborative Workspace"
- Lentini et al. (U.S. 7,290,061) discloses "System And Method For Internet Content Collaboration"

- Schwerdtfeger et al. (U.S. 6,829,746) discloses "Electronic Document Delivery System Employing Distributed Document Object Model (DOM) Based Transcoding"
- JustSystem, XMetal, 2008, JustSystem, pgs 1-2 in PDF format
- Fergusson et al., Data-Layer Collaboration in Graphical and Text Authoring, Nov 7, 2003, svgopen.org, pgs 1-8 in PDF format
- Raggett, Distributed DOM 1.0, August 10, 2007, W3C, pgs 1-10 in PDF Format

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manglesh M. Patel whose telephone number is (571) 272-5937. The examiner can normally be reached on M, W 6 am-3 pm T, TH 6 am-2pm, Fr 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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